

## **IN THE CLAIMS:**

### **1. (canceled)**

**2. (currently amended)** A sender side apparatus to which a path error monitoring method is applied for monitoring for an error in a communication path in a synchronous network by using an error detection code normally inserted into a first predetermined byte in an overhead in transmitted information ~~is applied~~, comprising:

a second predetermined byte inserting part performing an error detection code operation for a predetermined range in the transmitted information to obtain an error correction code normally inserted into a first predetermined byte in an overhead of transmitted information, and inserting the obtained error detection code into a second predetermined byte different from said first predetermined byte in the overhead in the transmitted information;

wherein the second predetermined byte inserting part has an inverting part inverting the error detection code obtained through the error detection code operation alternatively at a predetermined period and inserting the resulting error detection code into said second predetermined byte.

**3. (currently amended)** A receiver side apparatus to which a path error monitoring method is applied for monitoring for an error in a communication path in a synchronous network by using an error detection code normally inserted into a first predetermined byte in an overhead in transmitted information is applied, comprising:

a second predetermined byte comparing part performing an error detection code operation for a predetermined range in the transmitted information received and comparing the obtained error detection code with a second predetermined byte in the transmitted information received; and

a synchronizing part taking synchronization when a comparison result of said second predetermined byte comparing part indicates switching from a status where all bits coincide to a status where no bit coincides.

**4. (canceled)**

**5. (canceled)**

**6. (original)** The sender side apparatus as claimed in claim 2, wherein said second predetermined byte is within an operation range of said first predetermined byte, further comprising a first correcting part computing difference information between original contents in the second predetermined byte and said error detection code obtained through said error detection code operation and correcting contents in said first predetermined byte by inserting a difference between said difference information and original contents in the first predetermined byte into said first predetermined byte.

**7. (original)** The receiver side apparatus as claimed in claim 3, wherein said second predetermined byte is within an operation range of said first predetermined byte, further comprising a second correcting part computing difference information between

contents in the second predetermined byte in the transmitted information received and the error detection code obtained through said error detection code operation and correcting contents in said first predetermined byte by inserting a difference between said difference information and contents in the first predetermined byte in the transmitted information received into said first predetermined byte, and a fixed value inserting part inserting a fixed value into the second predetermined byte in the transmitted information received.

**8. (original)** The receiver side apparatus as claimed in claim 7, wherein said fixed value inserting part is capable of variably setting said fixed value.

**9. (original)** The sender side apparatus as claimed in claim 6, further comprising a first path alarm detecting part detecting a path alarm from contents of the overhead in transmitted information, wherein said second predetermined byte inserting part and said first correcting part are halted when said path alarm is detected.

**10. (original)** The receiver side apparatus as claimed in claim 3, further comprising a second path alarm detecting part detecting a path alarm from contents of the overhead in transmitted information received, wherein said second correcting part and said fixed value inserting part are halted when said path alarm is detected.